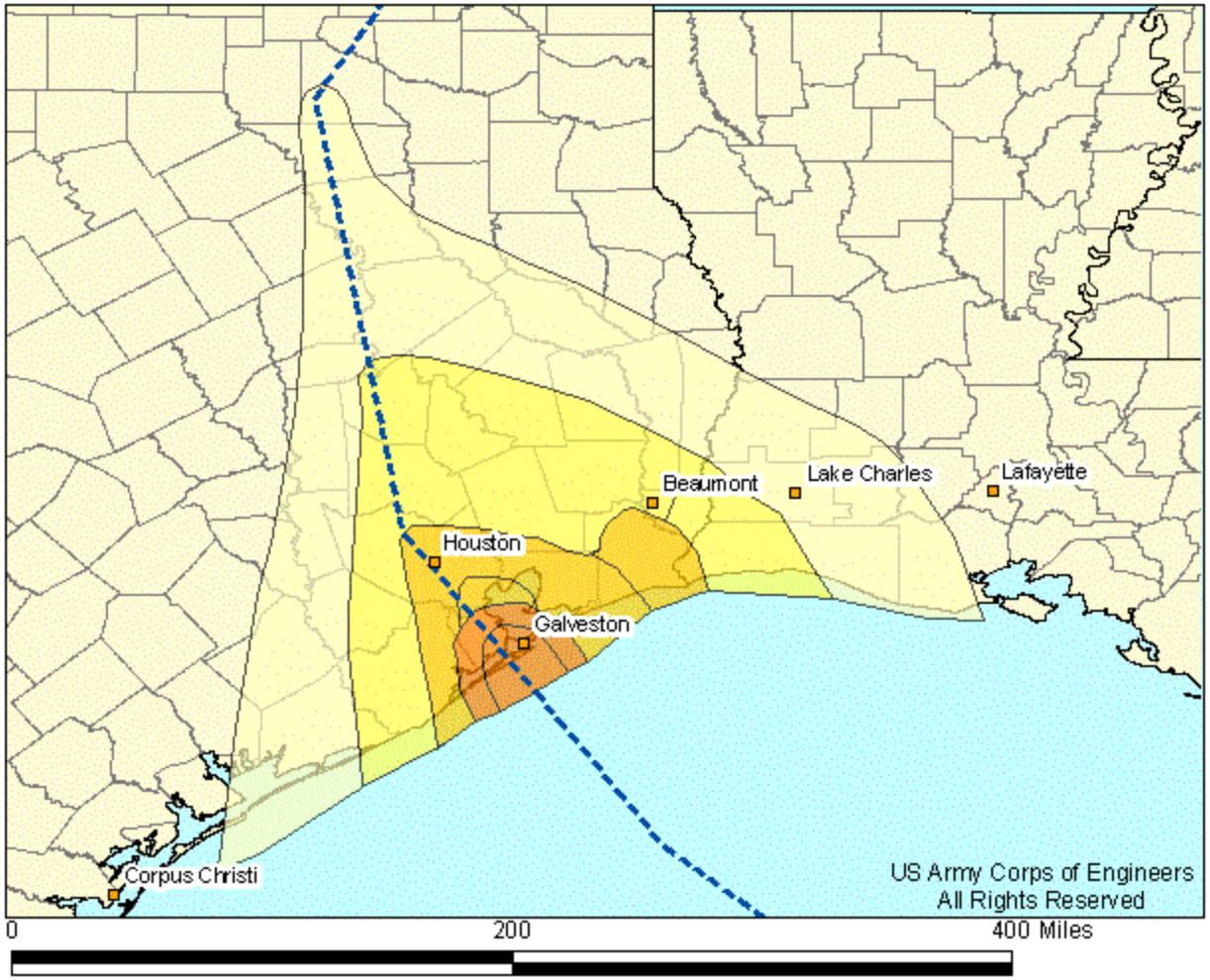
US Army Corps of Engineers

Hurricane Ike Projected Damage Areas

Landfall Expected In About 17 Hours

For Planning Purposes Only!



Post Landfall Projected Damage Areas

This model is based on a Category 3 storm making landfall near Galveston, TX.

Forecast Track

Projected Damage Areas

- CAT 0-type damage
- CAT 1-type damage
- CAT 2-type damage
- CAT 3-type damage
- CAT 4-type damage
- CAT 5-type damage

Information provided on this page displays a Category 3 storm making landfall near Galveston, TX. These projections are based on information from the NHC (1100 EDT 09/12/2008) forecast.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

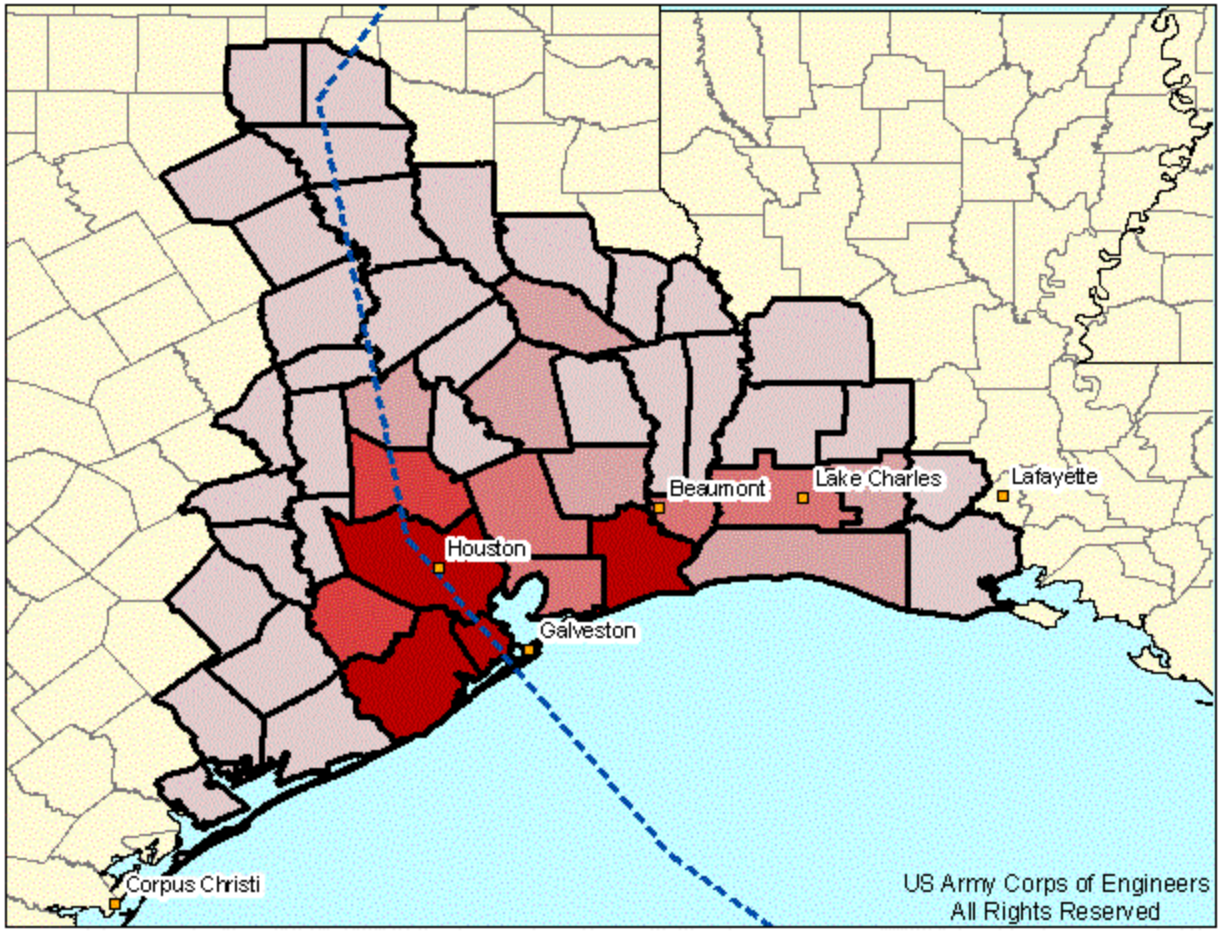
Hurricane Ike Projected Damage Areas	
Generated By: Siemsen/Deatrick, LRL 1130 EDT 09/12/2008	
Sources: HURREVAC LRL-DEBRIS	Page 1 of 13

US Army Corps of Engineers

Hurricane Ike Debris Model

Landfall Expected In About 17 Hours

For Planning Purposes Only!



Post Landfall Debris Model Results

Texas - 41,510,000 Yards
Louisiana - 858,000 Yards

Model results per County on following page

This model is based on a Category 3 storm making landfall near Galveston, TX.

Forecast Track

Debris

- < 100,000 cubic yards
- 100,000 - 249,999 cubic yards
- 250,000 - 499,999 cubic yards
- 500,000 - 999,999 cubic yards
- >1,000,000 cubic yards

Information provided on this page displays a Category 3 storm making landfall near Galveston, TX. These projections are based on information from the NHC (1100 EDT 09/12/2008) forecast. The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Ike Debris Model

Generated By: Siemsen/Deatrick, LRL
1130 EDT 09/12/2008

Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Ike Debris Model

Landfall Expected In About 17 Hours

For Planning Purposes Only!

State	Yards per State	County	Yards per County
Louisiana		Acadia	30,000
		Allen	31,000
		Beauregard	83,000
		Calcasieu	346,000
		Cameron	141,000
		Jefferson Davis	125,000
		Vermilion	93,000
		Vernon	9,000
Louisiana	858,000		
Texas		Anderson	64,000
		Angelina	114,000
		Austin	25,000
		Brazoria	1,846,000
		Brazos	< 1,000
		Calhoun	3,000
		Chambers	354,000
		Cherokee	43,000
		Colorado	5,000
		Fort Bend	994,000
		Freestone	7,000
		Galveston	7,465,000
		Grimes	41,000
		Hardin	178,000
		Harris	24,421,000
		Henderson	55,000
		Houston	53,000
		Jackson	5,000
		Jasper	92,000
		Jefferson	3,138,000
		Kaufman	< 1,000

State	Yards per State	County	Yards per County
Texas		Leon	26,000
(continued)		Liberty	321,000
		Madison	14,000
		Matagorda	65,000
		Montgomery	991,000
		Nacogdoches	10,000
		Navarro	< 1,000
		Newton	46,000
		Orange	495,000
		Polk	150,000
		Sabine	< 1,000
		San Augustine	4,000
		San Jacinto	85,000
		Trinity	52,000
		Tyler	68,000
		Van Zandt	18,000
		Walker	151,000
		Waller	44,000
		Washington	3,000
		Wharton	64,000
Texas	41,510,000		

The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane Ike Debris Model

Generated By: Siemsen/Deatrick, LRL
1130 EDT 09/12/2008

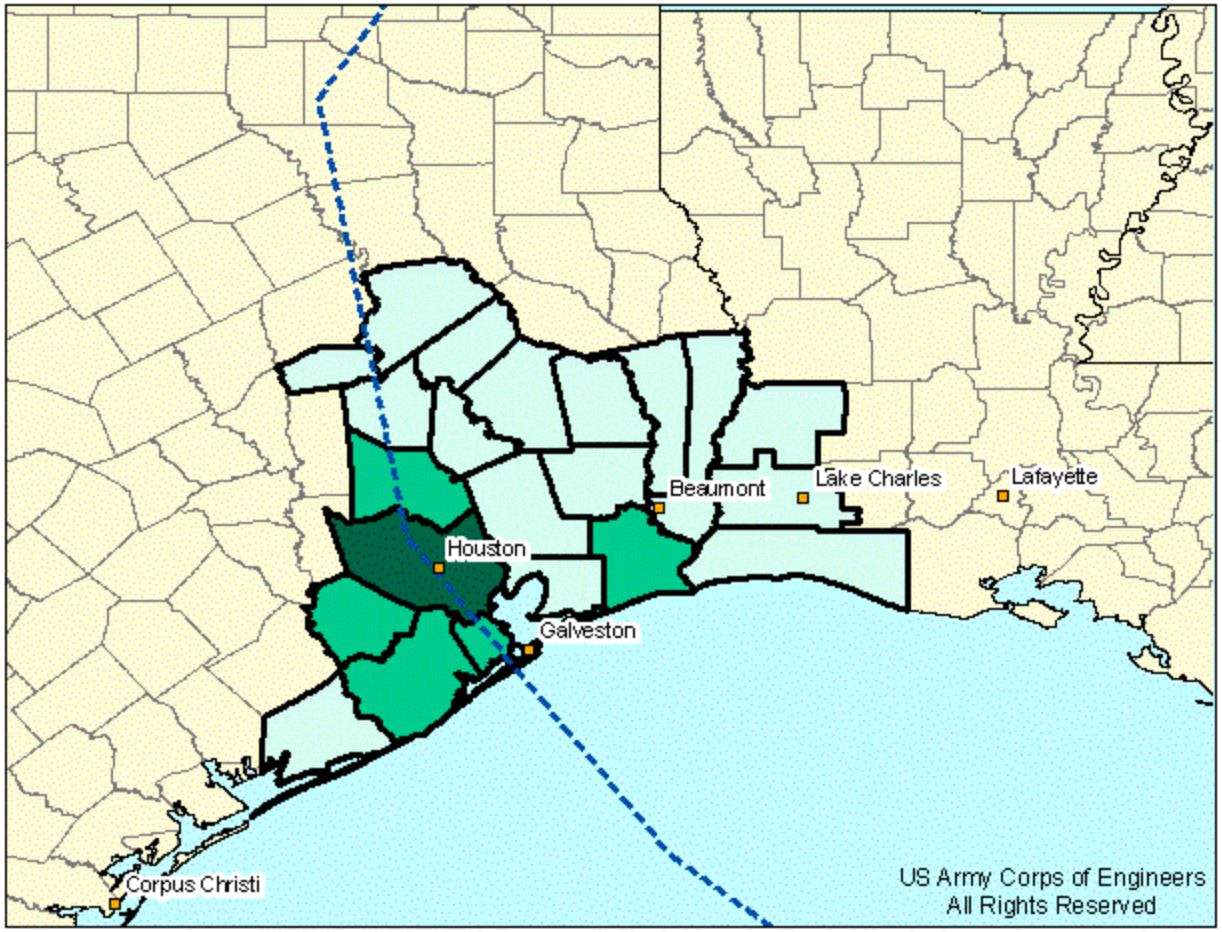
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Ike Commodities Model

Landfall Expected In About **17** Hours

For Planning Purposes Only!



Post Landfall Water Model Results

Day One / Day Two / Day Three
Texas – 66/132/263 Truckloads
Louisiana – 3/3/3 Truckloads

Model results per County on following page

This model is based on a Category 3 storm making landfall near Galveston, TX.

Forecast Track

Commodities

- < 5 Trucks Each
- 5 - 10 Trucks Each
- 11 - 20 Trucks Each
- 21 - 40 Trucks Each
- > 40 Trucks Each

Information provided on this page displays a Category 3 storm making landfall near Galveston, TX. These projections are based on information from the NHC ***(1100 EDT 09/12/2008)*** forecast. The amount of commodities forecasted is based on Mission Guide Book requirements and SME input. The graphic represents single day needs with full distribution system in place and operating.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Ike Commodities Model	
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Sources: HURREVAC LRL-DEBRIS	Page 4 of 13

US Army Corps of Engineers

Hurricane Ike Commodities Model

Landfall Expected In About 17 Hours

For Planning Purposes Only!

State	Truckloads per State	County	Truckloads per County
Louisiana		Beauregard	1
		Calcasieu	1
		Cameron	1
Louisiana	3		
Texas		Brazoria	13
		Chambers	2
		Fort Bend	20
		Galveston	12
		Hardin	3
		Harris	163
		Houston	1
		Jasper	1
		Jefferson	11
		Liberty	4
		Madison	1
		Matagorda	1
		Montgomery	17
		Newton	1
		Orange	4
		Polk	2
		San Jacinto	2
		Trinity	1
		Tyler	1
		Walker	3
Texas	263		

The amount of commodities forecasted is based on Mission Guide Book requirements and SME input and the above table indicates suggested needs based on phased deployment of a commodities distribution system.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane Ike Commodities Model

Generated By: Siemsen/Deatrick, LRL
1130 EDT 09/12/2008

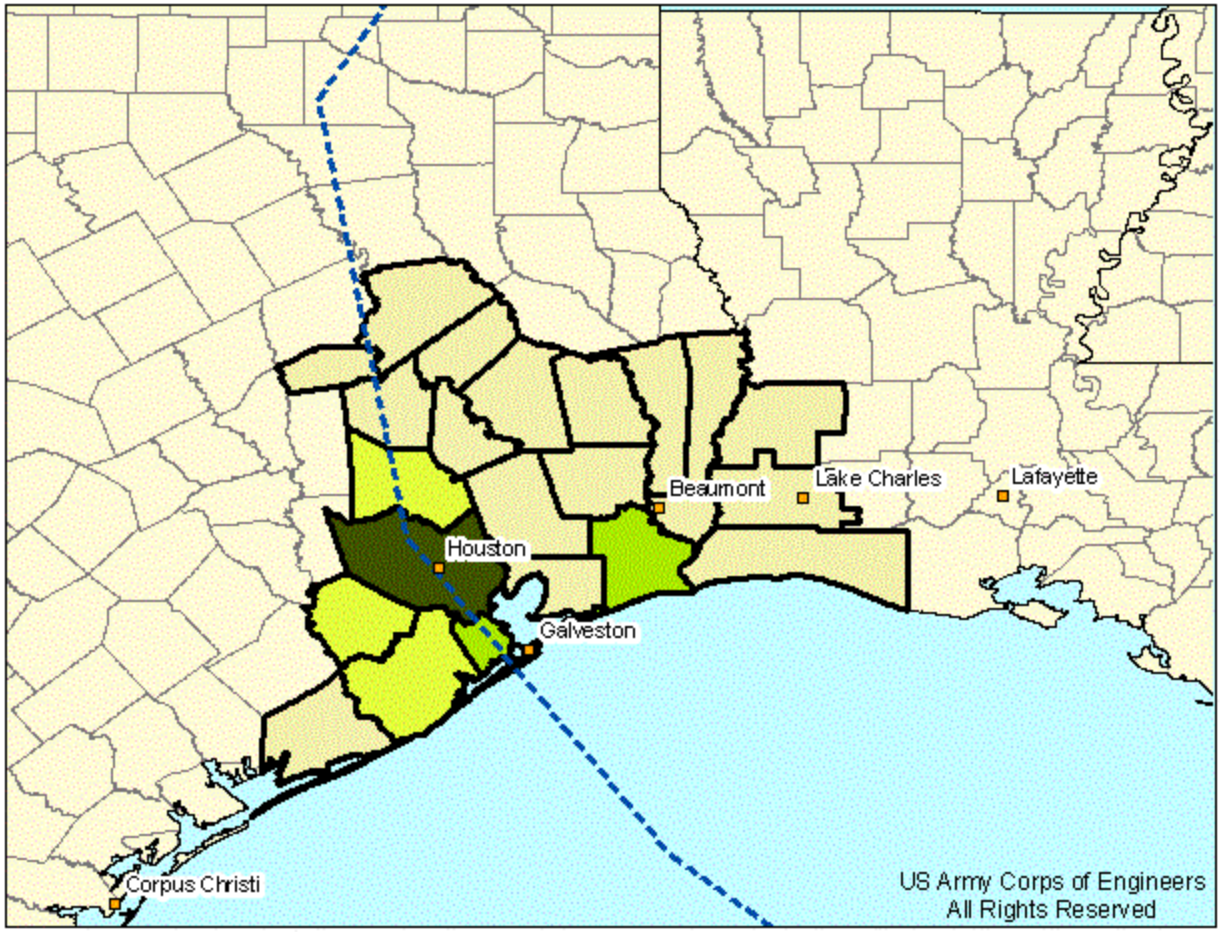
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Ike Temporary Roofing Model

Landfall Expected In About 17 Hours

For Planning Purposes Only!



Post Landfall Temporary Roofing Model Results

Texas - 67,100

Model results per County on following page

This model is based on a Category 3 storm making landfall near Galveston, TX.

Forecast Track

Temporary Roofing

- < 2,000 units
- 2,000 - 3,999 units
- 4,000 - 5,999 units
- 6,000 - 9,999 units
- > 10,000 units

Information provided on this page displays a Category 3 storm making landfall near Galveston, TX. These projections are based on information from the NHC (1100 EDT 09/12/2008) forecast. Temporary roofing is based on 2% in CAT 1, 5% in CAT 2 and 7% in CAT 3.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Ike Roofing Model

Generated By: Siemsen/Deatrick, LRL
1130 EDT 09/12/2008

Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Ike Temporary Roofing Model

Landfall Expected In About **17** Hours

For Planning Purposes Only!

State	House Units per State	County	House Units per County
Louisiana		Beauregard	< 100
		Calcasieu	< 100
		Cameron	< 100
Louisiana			
Texas		Brazoria	3,500
		Chambers	600
		Fort Bend	2,900
		Galveston	5,200
		Hardin	400
		Harris	45,100
		Houston	< 100
		Jasper	< 100
		Jefferson	4,300
		Liberty	700
		Madison	< 100
		Matagorda	< 100
		Montgomery	2,800
		Newton	< 100
		Orange	700
		Polk	300
		San Jacinto	200
		Trinity	< 100
		Tyler	< 100
		Walker	400
Texas	67,100		

Temporary roofing is based on 2% in CAT 1, 5% in CAT 2 and 7% in CAT 3.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

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Hurricane Ike Roofing Model

Generated By: Siemsen/Deatrick, LRL
1130 EDT 09/12/2008

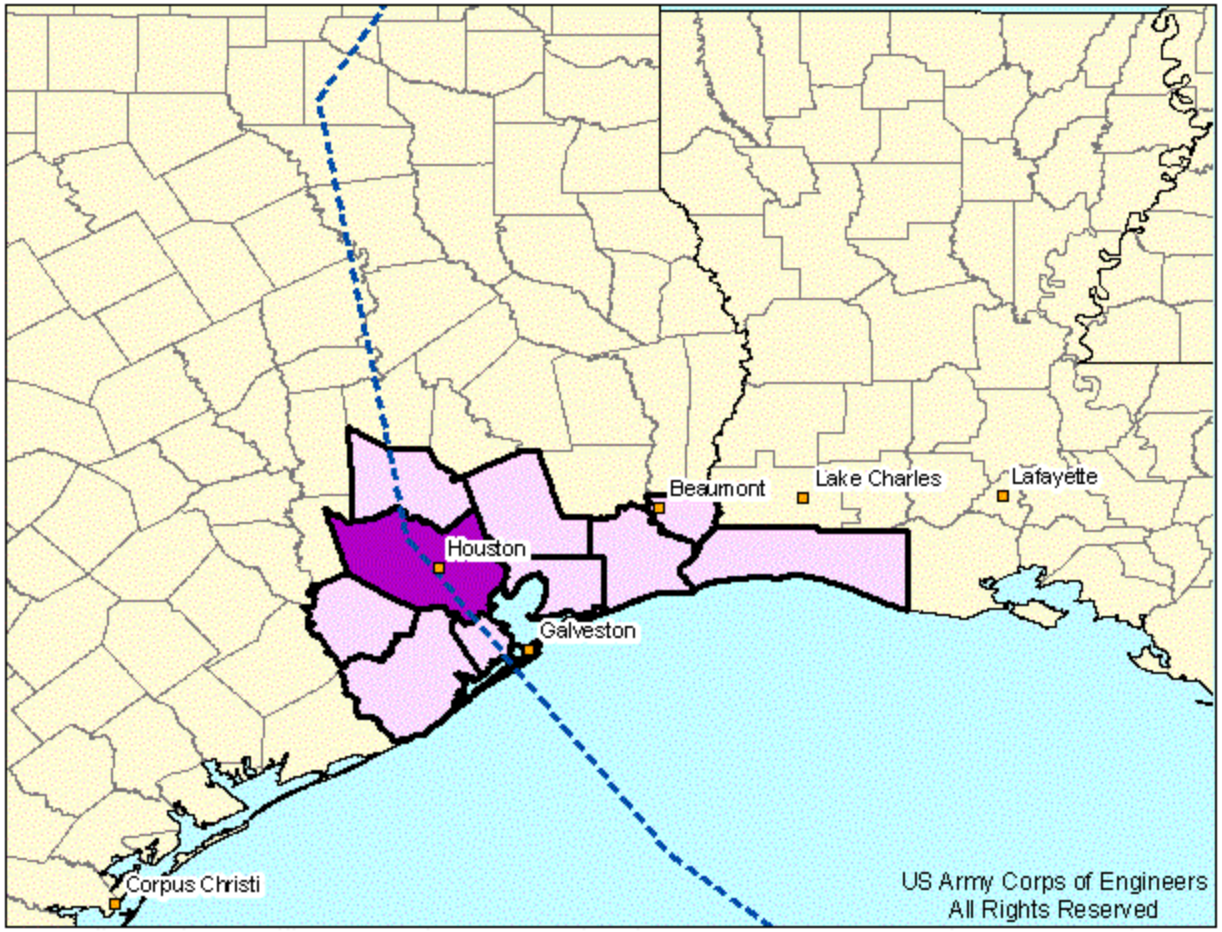
Sources:
HURREVAC
LRL-DEBRIS

Hurricane Ike Temporary Housing Model

US Army Corps of Engineers

Landfall Expected In About 17 Hours

For Planning Purposes Only!



Post Landfall Temporary Housing Model Results

Texas - 11,200

Model results per County on following page

This model is based on a Category 3 storm making landfall near Galveston, TX.

Forecast Track

Temporary Housing

- < 2,000 units
- 2,000 - 3,999 units
- 4,000 - 5,999 units
- 6,000 - 9,999 units
- > 10,000 units

Information provided on this page displays a Category 3 storm making landfall near Galveston, TX. These projections are based on information from the NHC (1100 EDT 09/12/2008) forecast. Temporary housing is based on 1% in CAT 2 and 2% in CAT 3.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Ike Housing Model

Generated By: Siemsen/Deatrick, LRL
1130 EDT 09/12/2008

Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Ike Temporary Housing Model

Landfall Expected In About **17** Hours

For Planning Purposes Only!

State	House Units per State	County	House Units per County
Louisiana		Cameron	< 100
Louisiana			
Texas		Brazoria	600
		Chambers	100
		Fort Bend	< 100
		Galveston	1,900
		Harris	7,700
		Jefferson	900
		Liberty	< 100
		Montgomery	< 100
		Orange	< 100
Texas	11,200		

Temporary housing is based on 1% in CAT 2 and 2% in CAT 3.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

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Hurricane Ike Housing Model

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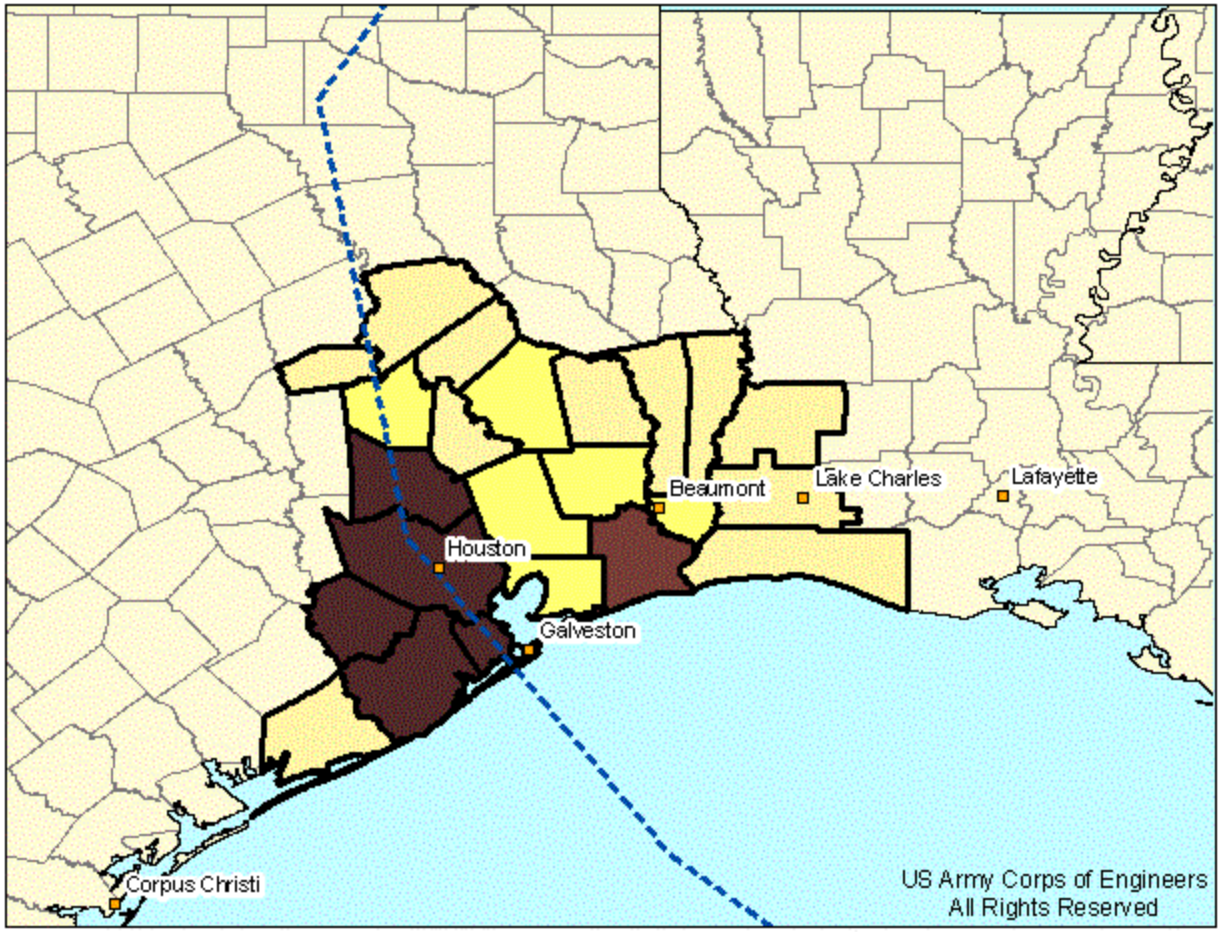
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Ike Population Model

Landfall Expected In About 17 Hours

For Planning Purposes Only!



Post Landfall Results – Resident Population Within Hurricane Force Winds

Texas - 5,984,000
Louisiana - 17,000

Model results per County on following page

This model is based on a Category 3 storm making landfall near Galveston, TX.

Forecast Track

Population

- < 25,000 persons
- 25,000 - 99,999 persons
- 100,000 - 174,999 persons
- 175,000 - 249,999 persons
- > 250,000 persons

Information provided on this page displays a Category 3 storm making landfall near Galveston, TX. These projections are based on information from the NHC (1100 EDT 09/12/2008) forecast. The numbers of persons included in this model output are those that would be included within estimated hurricane force winds (Census 2000 values adjusted to July 2007 values).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Ike Population Model	
Generated By: Siemsen/Deatrick, LRL 1130 EDT 09/12/2008	
Sources: HURREVAC LRL-DEBRIS	

US Army Corps of Engineers

Hurricane Ike Population Model

Landfall Expected In About 17 Hours

For Planning Purposes Only!

State	Population per State	County	Population per County
Louisiana		Beauregard	< 1,000
		Calcasieu	13,000
		Cameron	4,000
Louisiana	17,000		
Texas		Brazoria	293,000
		Chambers	29,000
		Fort Bend	464,000
		Galveston	285,000
		Hardin	52,000
		Harris	3,905,000
		Houston	< 1,000
		Jasper	10,000
		Jefferson	243,000
		Liberty	76,000
		Madison	< 1,000
		Matagorda	2,000
		Montgomery	398,000
		Newton	4,000
		Orange	83,000
		Polk	40,000
		San Jacinto	25,000
		Trinity	8,000
		Tyler	9,000
		Walker	58,000
Texas	5,984,000		

The number of persons estimated to be within the hurricane force winds comes from Census 2000 values adjusted to July 2007 values.

Details about this model may be obtained at http://www.englink.usace.army.mil
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Hurricane Ike Population Model

Generated By: Siemsen/Deatrick, LRL
1130 EDT 09/12/2008

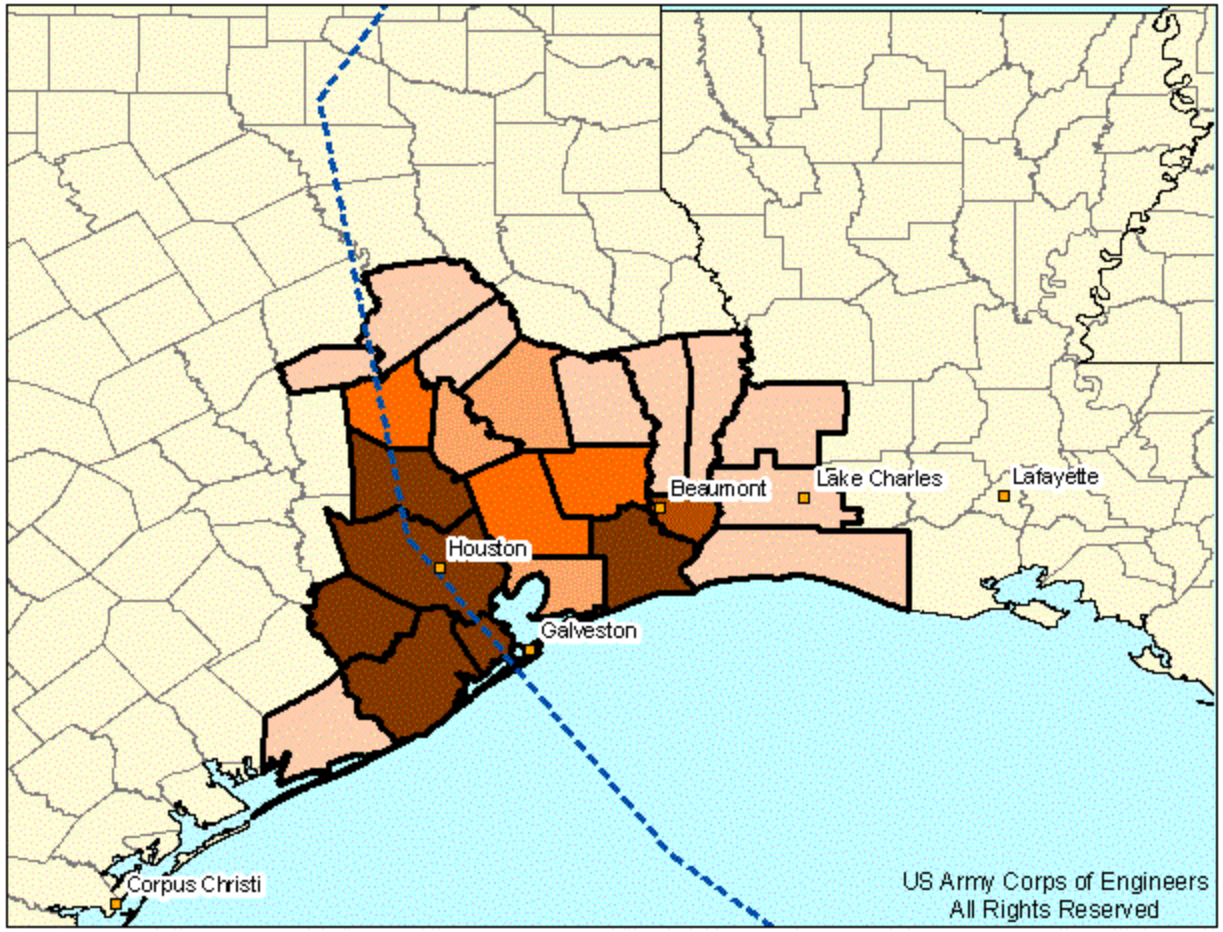
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Ike Households Model

Landfall Expected In About 17 Hours

For Planning Purposes Only!



Post Landfall Results – Resident Households Within Hurricane Force Winds

Texas - 2,112,000
Louisiana - 7,000

Model results per County on following page

This model is based on a Category 3 storm making landfall near Galveston, TX.

Forecast Track

Households

- < 7,500 households
- 7,500 - 14,999 households
- 15,000 - 24,999 households
- 25,000 - 49,999 households
- > 50000 households

Information provided on this page displays a Category 3 storm making landfall near Galveston, TX. These projections are based on information from the NHC (1100 EDT 09/12/2008) forecast. The numbers of households included in this model output are those that would be included within estimated hurricane force winds (Census 2000 values adjusted to July 2007 values).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Ike Households Model	
Generated By: Siemsen/Deatrick, LRL 1130 EDT 09/12/2008	
Sources: HURREVAC LRL-DEBRIS	Page 12 of 13

US Army Corps of Engineers

Hurricane Ike Households Model

Landfall Expected In About 17 Hours

For Planning Purposes Only!

State	Households per State	County	Households per County
Louisiana		Beauregard	< 1,000
		Calcasieu	5,000
		Cameron	2,000
Louisiana	7,000		
Texas		Brazoria	100,000
		Chambers	11,000
		Fort Bend	144,000
		Galveston	108,000
		Hardin	20,000
		Harris	1,386,000
		Houston	< 1,000
		Jasper	4,000
		Jefferson	90,000
		Liberty	25,000
		Madison	< 1,000
		Matagorda	< 1,000
		Montgomery	140,000
		Newton	2,000
		Orange	31,000
		Polk	15,000
		San Jacinto	10,000
		Trinity	4,000
		Tyler	4,000
		Walker	18,000
Texas	2,112,000		

The number of households estimated to be within the hurricane force winds comes from Census 2000 values adjusted to July 2007 values.

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Hurricane Ike Households Model

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1130 EDT 09/12/2008

Sources:
HURREVAC
LRL-DEBRIS